

Author Index,¹ 2001

The Telecommunications and Mission Operations Progress Report

- 42-145, January–March 2001*
- 42-146, April–June 2001*
- 42-147, July–September 2001*
- 42-148, October–December 2001*

Amaro, L. R.

- 42-147 Development of Ka-Band Inflatable Layered-Lens Technology, pp. 1–24.
S. Datthanasombat, A. Prata, Jr., and J. A. Harrell

Andrews, K.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.
V. Stanton, S. Dolinar, V. Chen, J. Berner, and F. Pollara

Backes, P.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.
See Sherwood, R.

Baher, F.

- 42-145 Open- and Closed-Loop Analysis of the 70-Meter Antenna Subreflector Positioner, pp. 1–15.

¹ In the case of joint authorship, the reader is referred to the citation under the first author, where all the authors of the article are listed.

Bathker, D.

- 42-148 Adjacent Band Interference from San Diego Area Transmitters to Goldstone Deep Space Network Receivers Near 2300 Megahertz, pp. 1–12.

See Ho, C.

Beebe, J.

- 42-146 Laboratory Characterization of Silicon Avalanche Photodiodes (APDs) for Pulse-Position Modulation (PPM) Detection, pp. 1–14.

See Srinivasan, M.

Berner, J.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.

See Andrews, K.

Biswas, A.

- 42-146 Laboratory Characterization of Silicon Avalanche Photodiodes (APDs) for Pulse-Position Modulation (PPM) Detection, pp. 1–14.

See Srinivasan, M.

- 42-148 Design and Analysis of a First-Generation Optical Pulse-Position Modulation Receiver, pp. 1–20.

See Vilnrotter, V.

Bordi, J. J.

- 42-146 Near Earth Asteroid Rendezvous (NEAR) Navigation Using Altimeter Range Observations, pp. 1–13.

J. K. Miller, B. G. Williams, and F. J. Pelletier

Brenner, M.

- 42-147 Gravity Deformation Measurements of NASA's Deep Space Network 70-Meter Reflector Antennas, pp. 1–15.

See Imbriale, W. A.

Britcliffe, M. J.

- 42-145 The Effects of Water on the Noise-Temperature Contribution of Deep Space Network Microwave Feed Components, pp. 1–5.
R. C. Clauss
- 42-145 Main-Reflector Manufacturing Technology for the Deep Space Optical Communications Ground Station, pp. 1–10.
D. J. Hoppe
- 42-145 Noise-Temperature Measurements of Deep Space Network Dichroic Plates at 8.4 Gigahertz, pp. 1–5.
J. E. Fernandez
- 42-147 Gravity Deformation Measurements of NASA’s Deep Space Network 70-Meter Reflector Antennas, pp. 1–15.
See Imbriale, W. A.
- 42-147 A Ten-Meter Ground-Station Telescope for Deep-Space Optical Communications: A Preliminary Design, pp. 1–17.
D. Hoppe, W. Roberts, and N. Page
- 42-147 A 2.5-Kelvin Gifford-McMahon/Joule-Thomson Cooler for Cavity Maser Applications, pp. 1–9.
T. Hanson and J. Fernandez

Calhoun, M.

- 42-148 A Stabilized 100-Megahertz and 1-Gigahertz Reference Frequency Distribution for Cassini Radio Science, pp. 1–11.
R. Sydnor and W. Diener

Cheetham, C.

- 42-147 Developing Low-Power Transceiver Technologies for In Situ Communication Applications, pp. 1–22.
See Lay, N.

Chen, V.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.
See Andrews, K.

Chien, S.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Clark, J. E.

- 42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

Clauss, R. C.

- 42-145 The Effects of Water on the Noise-Temperature Contribution of Deep Space Network Microwave Feed Components, pp. 1–5.

See Britcliffe, M. J.

Cooper, B.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Craparo, E. M.

- 42-147 Three Scanning Techniques for Deep Space Network Antennas to Estimate Spacecraft Position, pp. 1–17.

See Gawronski, W.

Darden, S.

- 42-145 Further Results on Bandwidth-Efficient Trellis-Coded Modulation with Prescribed Decoding Delay, pp. 1–30.

See Simon, M. K.

Datthanasombat, S.

- 42-147 Development of Ka-Band Inflatable Layered-Lens Technology, pp. 1–24.

See Amaro, L. R.

Diener, W.

- 42-148 A Stabilized 100-Megahertz and 1-Gigahertz Reference Frequency Distribution for Cassini Radio Science, pp. 1–11.

See Calhoun, M.

Divsalar, D.

- 42-145 A Reduced-Complexity, Highly Power-/Bandwidth-Efficient Coded Feher-Patented Quadrature-Phase-Shift-Keying System with Iterative Decoding, pp. 1–17.

See Simon, M. K.

- 42-146 Further Results on a Reduced-Complexity, Highly Power-/Bandwidth-Efficient Coded Feher-Patented Quadrature-Phase-Shift-Keying System with Iterative Decoding, pp. 1–7.

See Simon, M. K.

Dolinar, S.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.

See Andrews, K.

Estlin, T.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Farr, W.

- 42-148 Design and Analysis of a First-Generation Optical Pulse-Position Modulation Receiver, pp. 1–20.

See Vilnrotter, V.

Fernandez, J. E.

- 42-145 Noise-Temperature Measurements of Deep Space Network Dichroic Plates at 8.4 Gigahertz, pp. 1–5.

See Britcliffe, M. J.

- 42-147 A 2.5-Kelvin Gifford-McMahon/Joule-Thomson Cooler for Cavity Maser Applications, pp. 1–9.

See Britcliffe, M.

Fong, M.

- 42-145 Further Results on Bandwidth-Efficient Trellis-Coded Modulation with Prescribed Decoding Delay, pp. 1–30.

See Simon, M. K.

Fort, D.

- 42-148 Design and Analysis of a First-Generation Optical Pulse-Position Modulation Receiver, pp. 1–20.

See Vilnrotter, V.

Gawronski, W.

- 42-147 Three Scanning Techniques for Deep Space Network Antennas to Estimate Spacecraft Position, pp. 1–17.

E. M. Craparo

- 42-148 70-Meter Antenna Tracking and Mode Switching Near the Master Equatorial Keyhole, pp. 1–18.

Hamkins, J.

- 42-146 Laboratory Characterization of Silicon Avalanche Photodiodes (APDs) for Pulse-Position Modulation (PPM) Detection, pp. 1–14.

See Srinivasan, M.

Han, D.

- 42-146 Orbit Determination Uncertainty Distributions and Mappings in an Unstable Halo Orbit, pp. 1–18.

See Scheeres, D. J.

Hanson, T.

- 42-147 A 2.5-Kelvin Gifford-McMahon/Joule-Thomson Cooler for Cavity Maser Applications, pp. 1-9.

See Britcliffe, M.

Harrell, J. A.

- 42-147 Development of Ka-Band Inflatable Layered-Lens Technology, pp. 1-24.

See Amaro, L. R.

Hastrup, R.

- 42-147 Communications with Mars During Periods of Solar Conjunction: Initial Study Results, pp. 1-16.

See Morabito, D.

Ho, C.

- 42-148 Adjacent Band Interference from San Diego Area Transmitters to Goldstone Deep Space Network Receivers Near 2300 Megahertz, pp. 1-12.

D. Bathker, M. Sue, and T. Peng

Hoppe, D. J.

- 42-145 Development of a 7.2-, 8.4-, and 32-Gigahertz (X-/X-/Ka-Band) Three-Frequency Feed for the Deep Space Network, pp. 1-20.

See Stanton, P. H.

- 42-145 Main-Reflector Manufacturing Technology for the Deep Space Optical Communications Ground Station, pp. 1-10.

See Britcliffe, M. J.

- 42-145 The Sensitivity of Main-Reflector-Distortion Compensation to Deformable-Mirror Position, pp. 1-13.

- 42-147 A Study of Deformable-Mirror Performance Versus Actuator Distribution Using an Influence-Function Model, pp. 1-14.

- 42-147 A Ten-Meter Ground-Station Telescope for Deep-Space Optical Communications: A Preliminary Design, pp. 1-17.

See Britcliffe, M.

Hou, Y.

- 42-146 Orbit Determination Uncertainty Distributions and Mappings in an Unstable Halo Orbit, pp. 1–18.

See Scheeres, D. J.

Imbriale, W. A.

- 42-146 Analysis of a Thick Dichroic Plate with Arbitrarily Shaped Holes, pp. 1–21.

- 42-147 Gravity Deformation Measurements of NASA’s Deep Space Network 70-Meter Reflector Antennas, pp. 1–15.

M. J. Britcliffe and M. Brenner

Keihm, S. J.

- 42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

- 42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Kiely, A. B.

- 42-146 Memory-Efficient Recursive Interleaved Entropy Coding, pp. 1–14.

M. Klimesh

- 42-146 A New Entropy Coding Technique for Data Compression, pp. 1–48.

M. Klimesh

Klimesh, M.

- 42-146 Memory-Efficient Recursive Interleaved Entropy Coding, pp. 1–14.

See Kiely, A. B.

- 42-146 A New Entropy Coding Technique for Data Compression, pp. 1–48.

See Kiely, A. B.

Lanyi, G. E.

42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Lau, C.-W.

42-146 Quantum Detection Theory for the Free-Space Channel, pp. 1–34.

See Vilnrotter, V. A.

42-148 Quantum Detection and Channel Capacity Using State–Space Optimization, pp. 1–16.

V. A. Vilnrotter

Lay, N.

42-147 Developing Low-Power Transceiver Technologies for In Situ Communication Applications, pp. 1–22.

C. Cheetham, H. Mojaradi, and J. Neal

Linfield, R.

42-145 Mounting a Water Vapor Radiometer on a DSN Antenna Subreflector: Benefits for Radio Science and Millimeter-Wavelength VLBI, pp. 1–13.

42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Madden-Woods, B.

42-146 Laboratory Characterization of Silicon Avalanche Photodiodes (APDs) for Pulse-Position Modulation (PPM) Detection, pp. 1–14.

See Srinivasan, M.

Maxwell, S.

42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Miller, J. K.

- 42-146 Near Earth Asteroid Rendezvous (NEAR) Navigation Using Altimeter Range Observations, pp. 1–13.

See Bordi, J. J.

Mishkin, A.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Mojaradi, H.

- 42-147 Developing Low-Power Transceiver Technologies for In Situ Communication Applications, pp. 1–22.

See Lay, N.

Morabito, D.

- 42-147 Communications with Mars During Periods of Solar Conjunction: Initial Study Results, pp. 1–16.

R. Hastrup

Mutz, D.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Naudet, C. J.

- 42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

- 42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Neal, J.

- 42-147 Developing Low-Power Transceiver Technologies for In Situ Communication Applications, pp. 1–22.

See Lay, N.

Norris, J.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Otoshi, T. Y.

- 42-145 Measured Sun Noise Temperatures at 32 Gigahertz, pp. 1–32.

- 42-148 Antenna System Noise-Temperature Calibration Mismatch Errors Revisited, pp. 1–31.

Page, N.

- 42-147 A Ten-Meter Ground-Station Telescope for Deep-Space Optical Communications: A Preliminary Design, pp. 1–17.

See Britcliffe, M.

Pelletier, F. J.

- 42-146 Near Earth Asteroid Rendezvous (NEAR) Navigation Using Altimeter Range Observations, pp. 1–13.

See Bordi, J. J.

Peng, T.

- 42-148 Adjacent Band Interference from San Diego Area Transmitters to Goldstone Deep Space Network Receivers Near 2300 Megahertz, pp. 1–12.

See Ho, C.

Pollara, F.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.

See Andrews, K.

Prata, Jr., A.

42-147 Development of Ka-Band Inflatable Layered-Lens Technology, pp. 1-24.

See Amaro, L. R.

Rabideau, G.

42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1-16.

See Sherwood, R.

Reilly, H.

42-145 Development of a 7.2-, 8.4-, and 32-Gigahertz (X-/X-/Ka-Band) Three-Frequency Feed for the Deep Space Network, pp. 1-20.

See Stanton, P. H.

Resch, G. M.

42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1-20.

J. E. Clark, S. J. Keihm, G. E. Lanyi, C. J. Naudet, A. L. Riley, H. W. Rosenberger, and A. B. Tanner

42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1-12.

S. J. Keihm, G. E. Lanyi, R. P. Linfield, C. J. Naudet, A. L. Riley, H. W. Rosenberger, and A. B. Tanner

Riley, A. L.

42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1-20.

See Resch, G. M.

42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1-12.

See Resch, G. M.

Roberts, W.

42-147 A Ten-Meter Ground-Station Telescope for Deep-Space Optical Communications: A Preliminary Design, pp. 1-17.

See Britcliffe, M.

Rosenberger, H. W.

42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Sanii, B.

42-145 Calibrating Surface Weather Observations to Atmospheric Attenuation Measurements, pp. 1–10.

Scheeres, D. J.

42-146 Design and Analysis of Landing Trajectories and Low-Altitude Asteroid Flyovers, pp. 1–21.

42-146 Orbit Determination Uncertainty Distributions and Mappings in an Unstable Halo Orbit, pp. 1–18.

D. Han and Y. Hou

Shambayati, S.

42-148 Maximization of Data Return at X-Band and Ka-Band on the DSN’s 34-Meter Beam-Waveguide Antennas, pp. 1–20.

Shell, J.

42-146 Radio Frequency Fields in Multiple-Cavity Masers, pp. 1–14.

Sherwood, R.

42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

D. Mutz, T. Estlin, S. Chien, P. Backes, J. Norris, D. Tran, B. Cooper, G. Rabideau, A. Mishkin, and S. Maxwell

Sigman, E.

42-148 Design and Analysis of a First-Generation Optical Pulse-Position Modulation Receiver, pp. 1–20.

See Vilnrotter, V.

Simon, M. K.

- 42-145 Further Results on Bandwidth-Efficient Trellis-Coded Modulation with Prescribed Decoding Delay, pp. 1–30.

S. Darden and M. Fong

- 42-145 A Reduced-Complexity, Highly Power-/Bandwidth-Efficient Coded Feher-Patented Quadrature-Phase-Shift-Keying System with Iterative Decoding, pp. 1–17.

D. Divsalar

- 42-146 Further Results on a Reduced-Complexity, Highly Power-/Bandwidth-Efficient Coded Feher-Patented Quadrature-Phase-Shift-Keying System with Iterative Decoding, pp. 1–7.

D. Divsalar

Sommerville, J.

- 42-145 Determination of 70-Meter Antenna Elevation-Axis Inertia, pp. 1–17.

Srinivasan, M.

- 42-146 Laboratory Characterization of Silicon Avalanche Photodiodes (APDs) for Pulse-Position Modulation (PPM) Detection, pp. 1–14.

J. Hamkins, B. Madden-Woods, A. Biswas, and J. Beebe

Stanton, P. H.

- 42-145 Development of a 7.2-, 8.4-, and 32-Gigahertz (X-/X-/Ka-Band) Three-Frequency Feed for the Deep Space Network, pp. 1–20.

D. J. Hoppe and H. Reilly

Stanton, V.

- 42-148 Turbo-Decoder Implementation for the Deep Space Network, pp. 1–20.

See Andrews, K.

Sue, M.

- 42-148 Adjacent Band Interference from San Diego Area Transmitters to Goldstone Deep Space Network Receivers Near 2300 Megahertz, pp. 1–12.

See Ho, C.

Sydnor, R.

- 42-148 A Stabilized 100-Megahertz and 1-Gigahertz Reference Frequency Distribution for Cassini Radio Science, pp. 1–11.

See Calhoun, M.

Tanner, A. B.

- 42-145 The Media Calibration System for Cassini Radio Science: Part II, pp. 1–20.

See Resch, G. M.

- 42-148 The Media Calibration System for Cassini Radio Science: Part III, pp. 1–12.

See Resch, G. M.

Tran, D.

- 42-147 Autonomously Generating Operations Sequences for a Mars Rover Using Artificial Intelligence-Based Planning, pp. 1–16.

See Sherwood, R.

Vilnrotter, V. A.

- 42-146 Quantum Detection Theory for the Free-Space Channel, pp. 1–34.

C.-W. Lau

- 42-148 Design and Analysis of a First-Generation Optical Pulse-Position Modulation Receiver, pp. 1–20.

A. Biswas, W. Farr, D. Fort, and E. Sigman

- 42-148 Quantum Detection and Channel Capacity Using State–Space Optimization, pp. 1–16.

See Lau, C.-W.

Williams, B. G.

- 42-146 Near Earth Asteroid Rendezvous (NEAR) Navigation Using Altimeter Range Observations, pp. 1–13.

See Bordi, J. J.